V. THE COMMISSION SHOULD DETERMINE IMPAIRMENT FOR LOCAL EXCHANGE AND ACCESS MARKETS TOGETHER WITH OTHER SERVICES THAT COMPETE WITH SERVICES TRADITIONALLY PROVIDED BY THE ILEC

While the ILECs recommend that the Commission conduct separate impairment analysis for each potential service for which a CLEC may seek to obtain a UNE,[82] Alpheus suggests that structuring an impairment analysis in that manner is not called for under *USTA II*. Instead the Commission has already identified a logical grouping that is consistent with the objectives of the Act. As the Commission explained in adopting the qualifying services restriction that the D.C. Circuit ultimately invalidated, it is reasonable to group the service specific analysis into two categories: 1) those telecommunications services that compete with services traditionally provided by the ILEC and 2) those services that do not compete with such services. This allows the Commission to make more "nuanced" findings of impairment, without resorting to elaborate and administratively complex definitions of specific services. Further, this is consistent with the Act, which the Commission found sought to inject competition into markets traditionally dominated by the ILECs.[83]

The ILECs favor an approach that requires more individual impairment assessments but apparently do not foreclose the approach Alpheus has advocated. Regardless of how the Commission considers the impairment for requesting carriers providing access services there is strong evidence that the access market is far from competitive.

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[82] Verizon Comments at pp. 27-28, BST Comments pp. 63-67.

[83] *TRO* ¶ 1-3.

A. ILECs Maintain Legacy Monopoly Power in the Access Market and Will For Years to Come

ILECs' behavior provides the best evidence that the access market is not competitive. Despite their claims to the contrary, RBOC special access prices have increased substantially, predominantly in markets where the Commission has prematurely granted ILECs pricing flexibility.

BellSouth, for example, contends that competitive access providers are not impaired without access to UNEs,' claiming that the Commission cannot disregard facts and prior conclusions that competition exists for special access especially in markets where the Commission granted pricing flexibility.[84] *USTA II* recognizes, however, that the language of the Act, by using the term "impairment", creates a standard distinct from other forms of competitive analysis.[85]

Further, while BellSouth contends that the Commission must ensure it does not permit access to UNEs for special access,[86] BellSouth bases its contention largely on its misinterpreting the Court's criticism of the *TRO* for failing adequately to explain how the availability of special access is not relevant to the impairment inquiry. Because the ILECs do not provide dark fiber under their special access tariffs, the availability of tariffed services is of no consequence and should not discourage the Commission from finding impairment for dark fiber in providing competitive access services.

In addition, the evidence shows that the access market is not competitive and the ILECs still retain monopoly dominance. The most telling sign that the ILECs still possess market

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[84] BellSouth Comments at p. 63.

[85] *See e.g. USTA II* at 572.

[86] BellSouth Comments at p. 68.

power in the access market is the fact that the ILECs have increased special access prices since the introduction of pricing flexibility.[87] Alpheus has seen a 25% increase in special access ratio.[88] This is especially true for the mileage component of access services that is the equivalent of dedicated transport.[89] Alpheus' own experience ordering special access circuits is consistent with the trends indicated in the comments.[90]

In addition to the study provided by the Ad Hoc Users, other comments indicate that the RBOCs face little if any competition in the market for access services. Economic analysis provided by other parties confirms what Alpheus has learned in Texas, namely that the ILECs have steadily increased special access prices since receiving pricing flexibility.[91].

Finally ILEC insistence on substantial termination penalties, and lock up provisions indicate there is no real competition. Fundamental common sense indicates that in a competitive market, competitors would be unable to impose such restrictive penalties, and competitors would refuse to include them. Only where the supplier retains a dominant market position could it ever impose such restrictive terms and still obtain the vast majority of market share.

VI. ABANDONING THE TRO TRIGGERS MAXIMIZES THE RISK OF REVERSAL

In the *TRO*, the Commission adopted competitive triggers designed to determine whether a particular market was suitable for multiple, competitive supply.[92] On appeal, the D.C. Circuit did not disturb those triggers but merely established that the Commission, rather than the states,

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[87] T-Mobile Declaration of M. Williams at ¶ 36; TWTC Comments at pp. 17.

[88] Alpheus Reply Dec. ¶ 47.

[89] Alpheus Reply Dec. ¶ 48.

[90] Alpheus Reply Dec. ¶ 47-48.

[91] See T-Mobile Williams Dec. ¶ 36 (ILEC special access rates of return exceed regulated legacy rate of return; Time Warner Telecom Comments at p. 17 (ILEC special access prices have increased dramatically).

[92] *See e.g. USTA II* at 571 (observing that impairment inquiry was to determine "whether a market is suitable for competitive supply."

must ultimately apply the triggers.[93] In that context the Court implicitly affirmed the Commission's requirement that two, and in some cases three, non-ILEC providers be capable of providing an element in a particular market before eliminating access to UNEs.[94]

Because the D.C. Circuit left the Commission's *TRO* Triggers intact, any deviation from the use of those triggers would require substantial justification.[95] Indeed since the Court validated the triggers, any deviation maximizes the risk of reversal.

The RBOCs focus their attacks on the triggers on the D.C. Circuit's analysis of the Commission's justification of a route specific review of transport impairment. However, the impairment tests Alpheus propose properly address these very questions.

For dedicated transport, the first tier substantially addresses the Court's concern regarding a route-specific review, because the Commission would conclude that any transport routes between wire centers with 40,000 or more business lines are suitable for multiple competitive supply even on routes where no competitive entry has occurred to date. Further, the second tier considers the possibility that similar routes may be suitable for multiple competitive supply even when there is no competitive deployment on one route, but ultimately rejects that possibility because of the significant error costs likely to result. As the court acknowledged, some error costs are likely.[96] Because the Commission, in adopting this test will narrow the applicability of its triggers, it is reasonable to seek more precision in the middle tier, where the evidence of impairment is persuasive despite the existence of some isolated instances of routes being suitable for multiple competitive supply.

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93 *USTA II* at 568.

94 *USTA II* at 575; *See* also ALTS Comments at 37, 75.

95 *See Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 483 U.S. 29, 43 (1983)

96 *USTA II* at 575.

Similarly for loops, the unique building access arrangements that make neighboring buildings different warrants a location specific unbundling approach, bearing in mind that the D.C. Circuit did not suggest that the Commission could not undertake such an analysis, but only that it had not adequately explained why alternative methods of defining geographic markets were less preferable.[97]

As Alpheus explained in its initial comments, a broad geographic test would result in many false negatives/positives that would be harmful to economic growth, and prove to be an administrative nightmare. Even the ILEC submissions demonstrate that an MSA-wide analysis is not appropriate, claming that competitive deployments, and use of ILEC special access, are limited to on concentrated business markets in major metropolitan areas.[98] Since there is little difference between the ILEC and CLEC data on this point, Alpheus' position should be adopted.

VII. THE COMMISSION SHOULD EXERCISE ITS LEGAL AUTHORITY TO ADOPT A REASONABLE MULTI-YEAR TRANSITION TO PREVENT THE LOSS OF VAST BROADBAND NETWORKS

While the RBOCs recognize that the Commission has the authority to require unbundling even where the Commission has found no impairment, the RBOCS contend such transitions should be limited.[99] It is notable that the RBOC comments do not address transitions for CLECs that use elements for which there is no tariffed service to which the CLECs would migrate.[100] For example, while SBC's comments discuss transitional rates and an immediate move to special access pricing, SBC is silent on the appropriate transition period for UNEs such as dark fiber

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[97] *USTA II* at 575.

[98] SBC Comments at 36 (demand for high capacity services generally concentrated in large office parks and business parks).

[99] SBC Comments pp. 119-120, Verizon Comments p. 129.

[100] *See* SBC Comments at 119.

where the transition is physical disconnection from the UNE.[101] As explained in Alpheus' initial comments, this situation requires a longer transition that is consistent with the realities of deploying redundant facilities for dark fiber UNEs.

The Commission retains the legal authority to require a multi-year transition in order to avert or diminish the disruption likely to result from "flash cut" changes in the regulatory regime.[102] As the D.C. Circuit explained, "UNEs may enable a CLEC to enter the market gradually, building a customer base up to the level where its own investment would be profitable,"[103] As ALTS proposes, the Commission should find that CLECs using dark fiber remain impaired without access to dark fiber in the absence of a transition period that is of sufficient length in order to obtain replacement facilities from a third party, acquire duct from the ILEC or (when required) trench the streets and deploy its own fiber. Absent such a transition period, CLECs would be unable to migrate off of the UNE dark fiber and still serve the market economically.

Such a transition is markedly different from the transitional regulatory regimes identified in SBC's comments that the D.C. Circuit has vacated.[104] In *Environmental Defense Fund v. EPA*, the Agency sought to exempt completely certain projects from compliance with the statute it was charged with implementing. The Court held that such an exemption was unwarranted as a transition because the transition lacked any end; rather it was a permanent exemption instead of a

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[101] *Id.* at 119-120.

[102] *See Southwestern Bell v. FCC*, 153 F.3d 523, 538 (8th Cir. 1998); *Rural Tel. Coalition v. FCC*, 838 F.2d 1307, 1315 (D.C. Cir. 1988); *MCI Telecomms Corp. v. FCC* , 750 F.2d 135, 140 (D.C. Cir. 1984).

[103] *USTA I*, 290 F.3d at 424.

[104] *Id.* at 120; *see* Alpheus Reply Dec. ¶ 46.

transition.[105] Similarly the D.C. Circuit in *NRDC v. Reilly*, overturned an EPA stay of its regulations as a reasonable transitional regime.[106]

Neither case is on point here. First, the Alpheus transition does not seek to exempt dark fiber from the statute, but rather requests that the Commission find that impairment exists for a certain period of time until a reasonably efficient CLEC could transition from the UNE dark fiber. Second, the Alpheus transition does not seek to stay the effect of the Court's mandate, but rather proposes a number of different ways and timeframes by which impairment would end (and so would unbundling) on a particular dark fiber route. To the extent that the ILEC prefers a shorter transition timeframe, under the Alpheus transition proposal, it has the power to eliminate the impediments to CLEC deployment by making duct available for pulling fiber, thus removing a potential barrier to entry that is completely within the ILEC's control, and ending impairment on that route.

The Commission has already adopted and sustained a multi-year transition for line sharing.[107] Further, SBC itself proposed a multi-year transition from UNE-P to UNE-L in the *TRO* proceeding in 2002. In that letter, SBC asserted that a two-year transition was adequate for UNE-P.[108] Similarly SBC noted that the Commission "unquestionably has the authority under section 201(b) of the Act to adopt such a transition, asserting that "neither section 252(d)(1), nor any other provision of the Act for that matter," prevents the Commission from establishing

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[105] SBC Comments at 120 n. 351 citing 167 F. 3d 641, 649 (D.C. Cir. 1999); 976 F. 2d 36, 40-41 (D.C. Cir. 1992).

[106] *Id.*

[107] See 47 C.F.R. § 51.319(a)(1)(i)(B).

[108] *Id.* at p. 2.

transitional rules for network elements that the ILEC is no longer required to provide on an unbundled basis.[109]

As SBC's letter recognized,[110] , courts have sanctioned the Commission's use of multi-year transitions in order "to allow CLECs sufficient time to adjust their business models."[111] The Commission has thus adopted multi –year transition periods to avoid "flash cuts" to new regulatory regimes when such a flash cut would threaten competitors ability to honor multi-year contracts. Similar considerations for UNE dark fiber are warranted, at a minimum, not simply because Alpheus and other CLECs require additional time to adjust their business plans but because, unlike carriers relying on CLEC access charges or ISP reciprocal compensation, Alpheus must undertake a costly and lengthy process of physically deploying duplicative network facilities. Such a time and capital-intensive exercise is not conducive to a "flash-cut" process and requires a multi-year transition effort.

VIII. LINKS TO CMRS CARRIER CELL SITES AND CARRIER POPS SHOULD BE UNES

There is no legal basis for exempting entire categories of legacy fiber from the impairment test required by the Act. Distinctions about entrance facilities, end users and cell sites are completely extra-statutory constructs, with no defensible legal basis. This is evident when the Commission considers the impairment analysis for DS1 loops to cell sites compared to the impairment analysis for DS1s to other locations.

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[109] *Id.* at 3.

[110] *Id.* at 2.

[111] *CLEC Access Charge Reform Order*, 16 FCC Rcd 9923 ¶¶ 37, 45 (2001); *ISP Intercarrier Compensation Order* 16 FCC Rcd 9151 at ¶ 83.

Wireless carrier networks rely extensively on wireline facilities to transport their telecommunications traffic because, for various economic and technical reasons, most CMRS networks are only wireless in the last mile connection to the mobile phone.[112] As T-Mobile explains, wireless carrier networks rely extensively on wireline facilities to transport their telecommunications traffic because, most CMRS networks are only wireless between the cell tower and the handset.[113] The CMRS network moves the wireless portion of a to wireline facilities at "cell sites," that are located by the hundreds throughout a region. The network connects each cell site to the cellular provider's switch (*i.e.*, MTSO) usually through the use of DS1 facilities.[114]

A. ILEC Wireline Facilities Deployed to CMRS Cell Sites or Base Stations are Within the Statutory Definition of Network Element

There can be little dispute that the facilities ILECs deploy to serve CMRS carriers are a "network element".[115] The definition of "network element" in the Act, clearly encompasses the facilities ILECs deploy to provide CMRS carriers with the wireline components of their networks. The 1996 Act defines "network element" as "a facility or equipment used in the provision of telecommunications service."[116] ILEC copper or fiber cabling and electronics such as digital repeaters or optical multiplexers connecting an ILEC central office to a cellular tower site (sometimes referred to as a base station), or a Mobile Telecommunications Switching Office

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[112] T-Mobile Dec. of T. Wong ¶ 4, 8-9.

[113] *Id.* Attachment B.

[114] *See* El Paso Networks, LLC Comments, CC Dkt. 01-338, 96-98, 98-147, Joint Declaration of Robert Passmore and Francisco Maella, filed Nov. 6, 2003 ("EPN Passmore-Maella Declaration") at ¶ 12.

[115] *See USTA II,* at 585-586.

[116] 47 U.S.C. § 153(29).

("MTSO") are certainly facilities, and are plainly "used in the provision of a telecommunications service."[117]

Further, there is no technical distinction that would justify different treatment of loops to CMRS carrier cell site from traditional local loops. A DS1 or a DS3 is a DS1 or a DS3, regardless of the type of customer it serves.[118] The technical specifications of the interface are the same in a DS1 or DS3 delivered to a cell site or a DS1 or DS3 delivered to a residence or business or any other point in the network. The similarity between these two elements is apparent from the fact that carriers frequently deploy cell sites on the rooftops of multi-tenant buildings where ILECs have deployed "traditional" local loops. The copper or fiber cabling that carries traffic from the cell site to the ILEC central office is the exact same facility that carries traffic from the shoe store or doctor's office located at the multi-tenant building.[119]

B. Facilities Deployed to CMRS Carrier Cell Sites Possess the Same Economic Characteristics as UNE Loops

Given the fact that the architecture of a wireless network is typically ninety percent (90%) wireline, and that there are hundreds of cell sites in each major metropolitan CMRS network, neither CLECs nor CMRS providers are able to self-deploy their own transmission facilities to all cell sites, as the cost is prohibitive.[120]

As previously noted, the CMRS network connects the wireless portion of a call to wireline facilities at "cell sites," that are located by the hundreds throughout an MSA. For example, wireless coverage of a large MSA, such as Dallas-Fort Worth or Houston, by a single

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[117] *Id.*

[118] *See* EPN Passmore-Maella Declaration at ¶ 12

[119] *TRO* at ¶ 347.

[120] *See* T-Mobile Dec. of M. Williams ¶ 10-11.

CMRS carrier requires approximately 400 cell sites each, and coverage of smaller MSAs, such as San Antonio or Austin, require approximately 200 cell sites each per carrier.[121]

In the *TRO*, the Commission categorically rejected the claim that self-deployment of DS1 loops was economic. The Commission declared that the record showed little evidence of competitive deployment of DS1 loops. Comments in this proceeding provide further evidence, based on the *TRO* trigger cases, which demonstrate that the Commission was absolutely correct.[122] The same factors that make self-provisioning of local loops uneconomic also make self-provisioning of DS1 facilities to cell sites uneconomic.

Like DS1 loops, ILEC facilities deployed to cell sites only serve one customer, carry low volumes of traffic (DS1) and involve sunk costs.[123] Both evidence and Alpheus' experience in Texas establish that the transmission links from CMRS carrier cell sites to the ILEC central office are not "suitable for multiple competitive supply." Rather, as T-Mobile suggests, they are more suited for a natural monopoly because "there is neither the customer base, nor the traffic density, to support multiple firms."[124]

Any carrier attempting to self-provision such facilities, whether a CLEC such as Alpheus providing service to CMRS carriers, or the CMRS carrier itself, would "face a distinct cost disadvantage relative to the incumbent LECs," Because the ILEC has already "incurred the sunk cost of building its existing network" the ILEC is "able to provide the link at a lower cost than the CMRS carrier's cost of self provisioning."[125] Requesting carriers such as Alpheus are unable

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[121] *See* EPN Passmore-Maella Declaration at ¶ 12.

[122] *See* NuVox Comments at p. 12-14.

[123] T-Mobile Williams Dec. ¶ 10.

[124] *Id.* at ¶ 11.

[125] T-Mobile Williams Dec. ¶ 11.

to self-provision these facilities in an economic manner and there is no alternative supplier for these facilities, other than the ILEC's ubiquitous network.

Because self-provisioning is not economic, no alternative supplier can or would be willing to invest in a duplicative facility. Rather, the only source of competition to the ILEC for provisioning this element will be carriers able to obtain spare capacity from the ILEC to incorporate that facility into the finished services it provides the CMRS carrier. T-Mobile explains that in many instances the ILEC's ubiquitous network renders the ILEC the primary or the only sources for facilities to a CMRS provider's cell sites and switches, and the ILEC's refusal to provide such facilities as UNEs significantly increases the cost of the CMRS providers' networks and impedes their ability to compete.[126] In numerous markets, there is virtually no alternative to the ILEC facilities that serve cell sites, leaving CMRS carriers captive to the ILECs.[127]

Unlike CLEC switches the Commission discussed in its review of entrance facilities,[128] CMRS carriers cannot choose to locate cell sites close to ILEC wire centers to control costs; rather they must be located according to customer demand is located in order to provide ubiquitous coverage.[129] Examples of this are the many cell sites that dot the highways and large residential corridors of cities across America.

1. CLECs are Impaired in Providing Service Regardless of the Commission's Finding Concerning CMRS Carriers

While the D.C. Circuit questioned whether the Commission can order unbundling for CMRS carriers, the outcome of the Commission's remand on that issue has no bearing on

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[126] *See* T-Mobile Wong Dec. ¶ 5 (95% of T-Mobile's cell site to ILEC CO loops obtained from ILECs).

[127] T-Mobile Wong Dec. ¶ 8-9; *see also* Passmore-Maella Declaration at ¶ 23.

[128] *TRO* at ¶ 365.

[129] T-Mobile Williams Dec. ¶ 14.

whether Alpheus or other CLECs can obtain access to ILEC bottleneck facilities as UNEs and incorporate such facilities in finished telecommunications services provided to CMRS carriers. Verizon claims that any Commission decision regarding access to UNEs by CMRS carriers should apply equally to CLECs.[130] Verizon's claim has no legal merit. When Alpheus provides service to CMRS carriers Alpheus does not provide CMRS service. Thus, there can be no dispute that regardless of whether CMRS carriers are impaired, wholesale CLECs providing telecommunications service are impaired without unbundled access to facilities to their customers' premises.

The Act provides that ILECs must provide unbundled access to network elements to "any requesting telecommunications carrier for provision of a telecommunications service."[131] Wholesale carriers are telecommunications carriers and the services they provide are telecommunications services.[132] Competitive wholesale carriers promote the goals of the Act by enabling other carriers to provide competitive services to retail customers.

The Commission should foster the development of a competitive wholesale market for the wireline services on which CMRS carriers rely to provide service to American consumers. As the Commission is aware, a competitive wholesale market is critical to the proper functioning of a competitive retail market. Retail providers cannot sufficiently differentiate their products from their retail competitors when all the retail providers must use the same wholesale supplier. This unnecessarily restricts innovation to that allowed by the wholesale carrier. This is especially problematic when the dominant wholesale provider is also the dominant retail carrier. A properly functioning wholesale market requires an honest competitive wholesale broker. This

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[130] Verizon Comments p. 73.

[131] 47 U.S.C. § 251(c)(3).

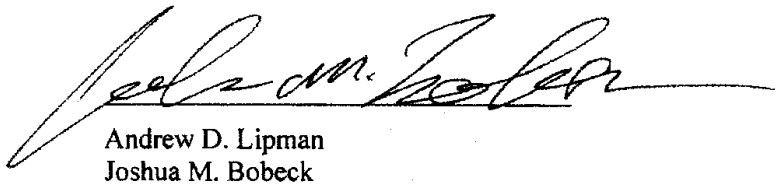
[132] *TRO* ¶ 153.

is true if wireless is ever to become a true alternative to wireline. Indeed, if wireless and other last mile broadband solutions, such as BPL or Wi-Max, are truly to deliver on their promise; they cannot be wholly reliant on their main competitors for transporting traffic once that traffic leaves the last mile. Horizontal specialization and marketing, switching, transport and, billing will be characteristic of a healthy, competitive marketplace in the post-vertically integrated monopoly paradigm.

IX. CONCLUSION

Alpheus requests that the Commission conclude this proceeding, in accordance with the recommendations proposed in these Reply Comments, at the earliest possible date.

Respectfully submitted,



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Washington, DC 20554

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OFFICE OF THE SECRETARY

In the Matter of	)	
	)	
Unbundled Access to Network Elements	)	WC Docket No. 04-313
	)	
Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers	)	CC Docket No. 01-338

ALPHEUS COMMUNICATIONS, L.P.
JOINT REPLY DECLARATION OF
ELEUTERIO (TEO) GALVAN JR. AND FRANCISCO MAELLA

We, Eleuterio (Teo) Galvan Jr. and Francisco Maella, declare as follows:

1. We each are over 21 years of age and competent to give this Declaration. We both know the information set forth in this Declaration to be correct as a matter of our personal knowledge and as a result of our positions with Alpheus Communications, L.P. ("Alpheus").

2. I, Teo Galvan, as Vice President OSP Engineering and Construction, oversee the engineering department that is responsible for designing and building Alpheus' fiber optic network. I am presently responsible for the oversight of a staff of engineering managers and Alpheus' outside engineering contractors. Together, my staff and I are responsible for the design and construction of fiber optic network projects for Alpheus. Before joining Alpheus in 2000, I was employed by Southwestern Bell Telephone Company ("SWBT"), now SBC-Texas, in various fiber optic engineering and outside plant capacities since 1978. I presently have over twenty-six years of experience in the telecommunications industry.

3. I, Francisco Maella, have the primary responsibility within Alpheus to manage the network engineering, planning, provisioning and operations functions for Alpheus. Prior to joining Alpheus, I managed the Network Architecture and Design organization at Valiant Networks, Inc. where I was responsible for architecture, supplier selection and design of optical, data and voice networks for carrier customers and, prior to that, I was employed by Williams Communications Group as Senior Staff Manager and Chief Technologist of Data Technologies where I was responsible for the design, supplier selection, and deployment of ATM, Frame Relay and IP technologies. Prior to Williams, I was employed by MCI WorldCom where I held engineering positions with responsibilities that included the deployment of voice, data, and transport technologies.

4. We make this Reply Declaration in support of Alpheus' comments in WCB Docket No. 04-313 and CC Docket 01-338. The purpose of our declaration is to respond to the inaccuracies presented in the comments filed by BellSouth, SBC, Qwest and Verizon and in their joint UNE Report. In particular, we also demonstrate how the RBOC proposals for determining impairment for dark fiber dedicated transport and loops are inconsistent with patterns of CLEC fiber deployment.

IMPAIRMENT ANALYSIS

5. Although we should no longer be surprised by the extreme positions that the ILECs present to maintain their monopoly, we were still incredulous and disappointed that SBC would take the nonsensical position that there should be a national finding of non-impairment for dark fiber loops and transport. To say that there is evidence of competitively available fiber or that CLECs have the ability and economic incentive to

duplicate fiber transport (prior to aggregating sufficient customer traffic) where the ILECs retain large quantities of unused spare fiber capacity everywhere is, of course, absurd and untrue.

6. It is worth noting that while Alpheus is willing to pay SBC a fair price for its spare fiber SBC is unwilling to provide Alpheus with fiber at any price. We find this startling considering the vast amount of spare capacity SBC has in its interoffice fiber network. The following chart shows, based on our experience, the amount of spare interoffice fiber SBC currently has in each Texas market Alpheus serves:

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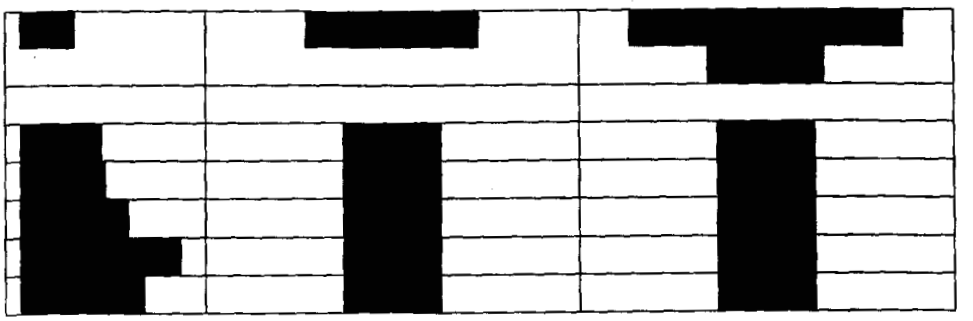

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For loops, the ILEC typically deploys 24 fiber count cables but only light 4 fibers at the customer premises. To augment capacity at that location using the four fibers an efficient carrier would not light more fiber, but would add capacity by changing line cards or adding a new multiplexer rather than add a new multiplexer at both the central office and customer location and activate another 4 fibers.)

7. Alpheus' own experience deploying capital and facilities to assemble a state-of-the-art wholesale network is instructive.[1] While Alpheus believed it had to have similar ubiquity to the ILEC to transport carrier traffic over a broad geographic footprint, it had to balance that deployment where it made economic sense. Alpheus is collocated in eighty-five percent of the SBC wire centers in Dallas, Houston, Ft. Worth, San Antonio and Austin. Importantly, this means that investing the capital in collocation arrangements (including optical multiplexing equipment) was not justified in the remaining fifteen percent of the wire centers. To now suggest that every efficient new entrant should trench the streets and deploy its own loop and transport fiber, while sustaining the cost of collocation defies logic. Of course, what was impractical in the free capital spending days of the telecom — "dot-com" bubble is even less possible in the current environment where access to capital is severely constrained. Even the ILECs, with their market share guaranteed based on their monopoly legacy, no longer subscribe to a "build it and they will come" model. No rational CLEC should or could, employ such a capital spending strategy, and the ILEC proposal to have them do so is just silly.

8. Examples abound to show why CLECs cannot economically deploy their own dark fiber. For instance, in Houston, Texas (7th largest MSA) there were nine central offices in which Alpheus determined it was not economic to collocate. The makeup of these wire centers is telling. For instance, *** **BEGIN CONFIDENTIAL** [redacted] **END CONFIDENTIAL** *** is a rural farming area with some sprawling

[1] Contrary to the claims in the RBOC UNE Report at III-6 and III-15 Alpheus (f/k/a El Paso Global Networks, does not provide wholesale dark fiber; rather Alpheus wholesale "lit" services ride over Al-

residential neighborhoods and no multi-tenant buildings. There is certainly no concentration of business customers. *** **BEGIN CONFIDENTIAL** [redacted] **END CONFIDENTIAL** *** is a residential area with some small businesses that support a tourist trade. Again, there are few, if any, multi-tenant buildings and no concentration of business customers. *** **BEGIN CONFIDENTIAL** [redacted] **END CONFIDENTIAL** *** is a rural area with one refinery, some residential areas but no material business customers.

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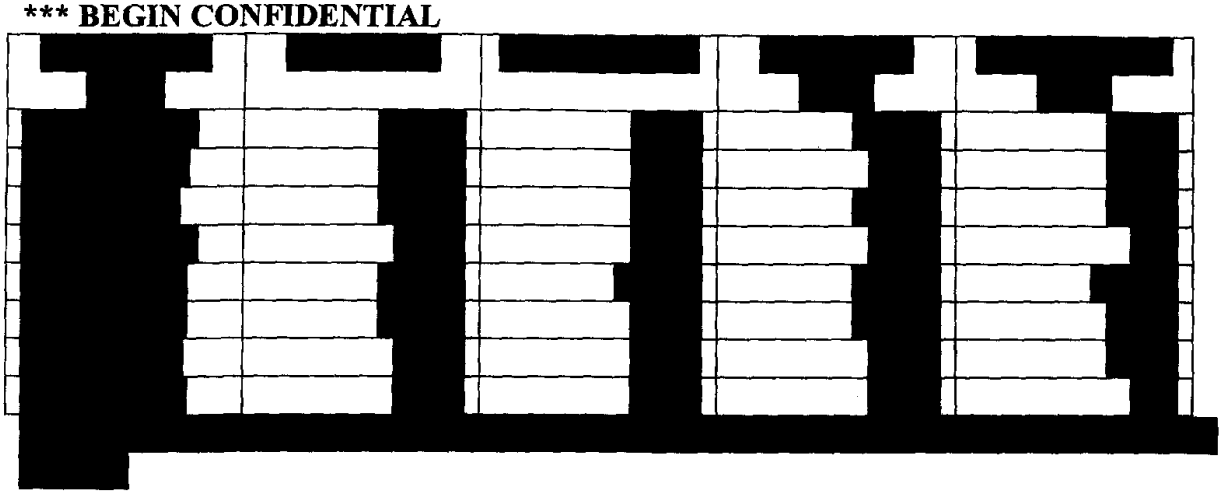

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9. As shown on the chart above, for each of the SBC wire centers in the Houston MSA where Alpheus is not collocated, in all but one case, the number of business lines is approximately 6000 or less. The one exception was *** **BEGIN CONFIDENTIAL** [redacted], **END CONFIDENTIAL** *** where the cost of collocation might have been justified because the wire center has approximately *** **BEGIN CONFIDENTIAL** [redacted], **END CONFIDENTIAL** *** but SBC had no UNE dark fiber to

pheus' transport network which uses UNE dark fiber.

an alternate central office, which prevented Alpheus from obtaining a redundant transport route to, and from, that wire center. Because Alpheus' network design requires redundancy on all of its transport routes, and the only way to achieve redundancy required an expensive fiber build, the cost to deploy to that wire center could not be justified. Thus, the company decided to forego deploying dedicated transport to this wire center. It has been Alpheus' experience that if the wire center has fewer than 20,000 business lines, self-deployment is definitely not sustainable. Indeed, self-deployment is often uneconomic for many wire centers with more than 20,000 business lines.

10. Data from the Dallas-Fort Worth MSA also supports this analysis. In the fourth largest MSA in the country , there are thirty-two wire centers in Dallas and twenty-five in Fort Worth. Of these fifty-seven potential collocation sites, there were seventeen wire centers where Alpheus determined that the cost of collocation was not economically justifiable, much less the cost of fiber deployment. The chart below outlines the makeup of the wire centers.[2]

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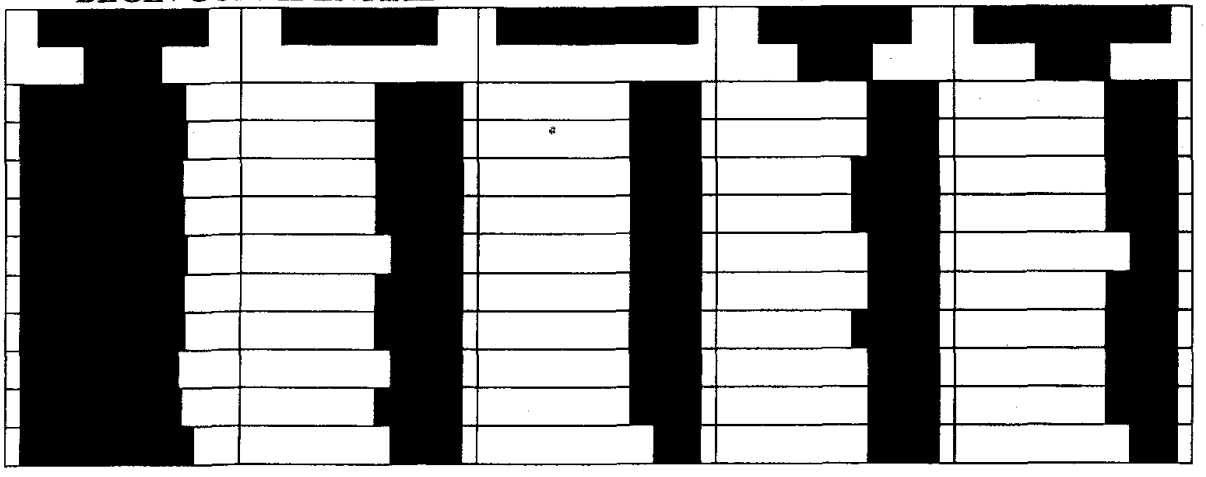
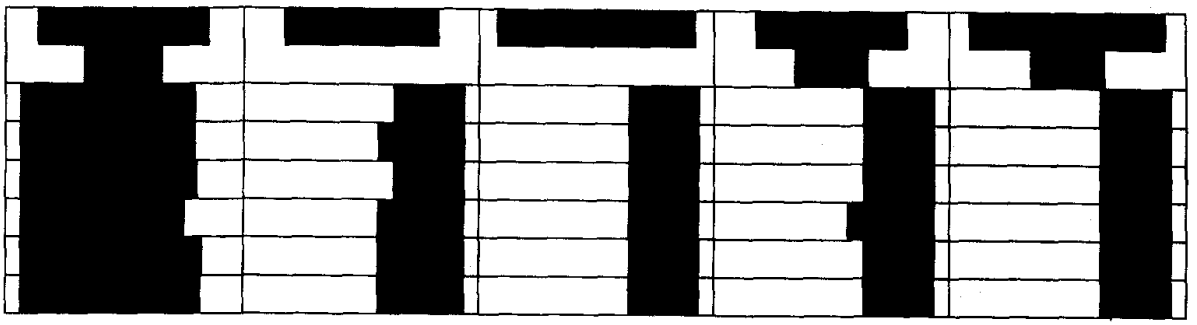


[2] Again this data is from the PNR access line data provided to the Commission as indicated above.



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11. There are many similarities among these routes. First, each of these wire centers contains less than 20,000 lines total; the number of residential lines are generally double the number of business lines and there are less than 3,000 access lines. Likewise, these wire centers are predominantly residential, large in geographic scope and have low population density.

12. Thus, the data shows that wire centers that have 1) less than approximately 6,000 business lines, which are 2) are predominately residential, and 3) have low population density and 4) large in geographic area, do not warrant the economic investment in collocation. Collocation is a critical aspect of Alpheus' business model because it provides the ubiquitous reach that customers desire from their wholesale transport provider. In other words, once a CLEC seeks to serve a customer where traffic demand is not naturally concentrated (i.e. outside a central business district), the CLEC will need to use some of the ILEC infrastructure in order to economically access the ILEC's last mile facilities and the customers by those facilities. CLECs are required to access these last mile facilities at the ILEC central office.

13. The wire centers that have between 6,000 and 20,000 business lines may warrant the investment in collocation, but the cost of deploying transport between the wire centers, coupled with the cost of collocation makes providing dedicated transport between such offices uneconomic. For instance, the charts below identify the wire centers with 6,000 to 20,000 business lines in Dallas and Houston in which Alpheus is currently collocated, and using UNE dark fiber transport to reach these offices.

DALLAS

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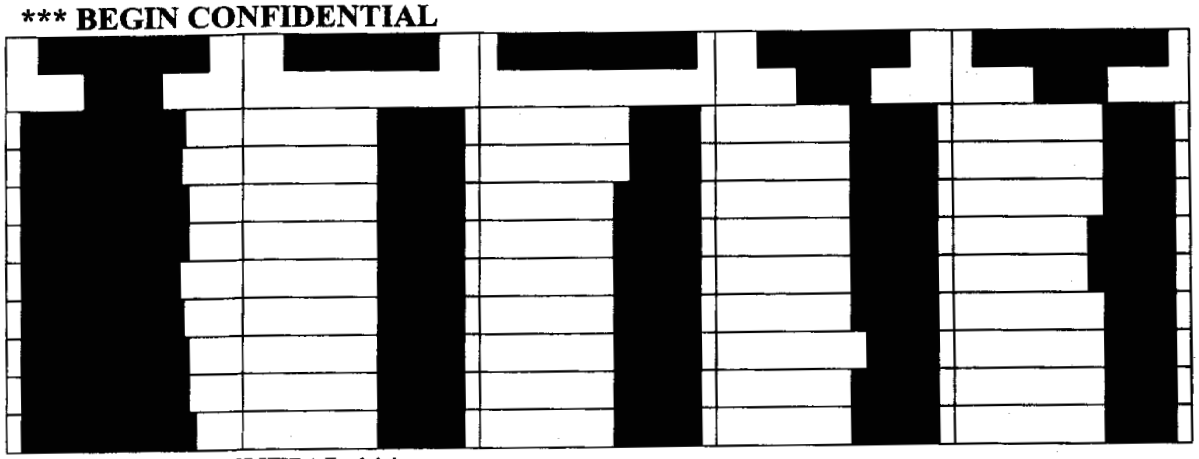

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HOUSTON

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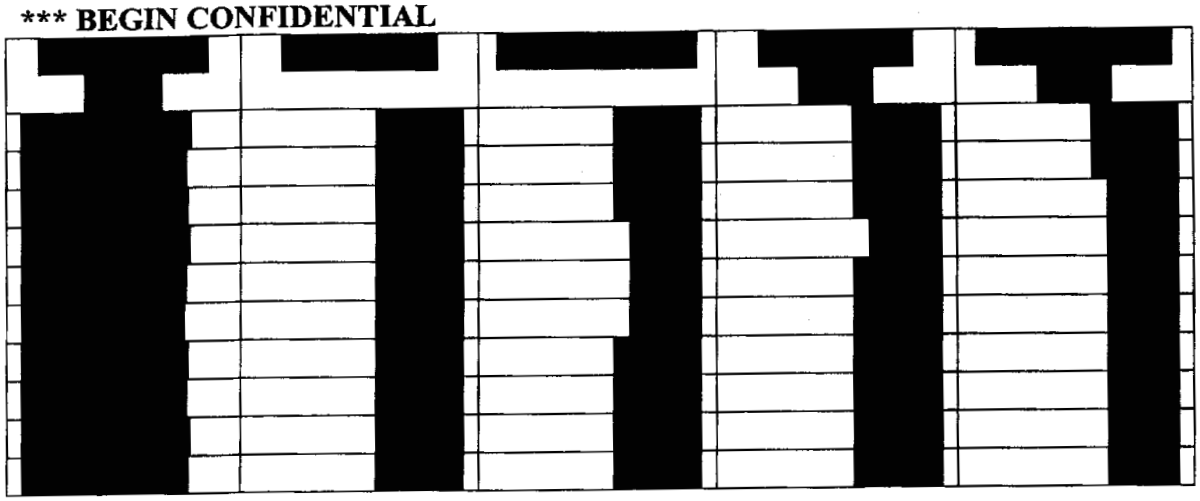

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14. Again, similarities exist in these wire centers. Each wire center has between 20,000 and 55,000 total lines. In most cases, the residential lines significantly outnumber the business lines, with the number of business lines typically totaling less than 20,000 and the number of special access lines falling between 3,000-12,000 lines.

15. Alpheus now has four years of experience in serving and analyzing the marketplace in the major Texas markets. Based on this experience, Alpheus has observed that traffic between ILEC wire centers with 6,000 to 20,000 business lines does not justify the cost of building transport between those wire centers. The cost of construction could not be justified based on the addressable market density in these wire centers today. For instance, even in ***** BEGIN CONFIDENTIAL** [redacted], **END CONFIDENTIAL ***** which has almost 15,000 business lines, the majority of those business lines come from a single customer location, a very large hospital. There are no other material commercial customers in that wire center. The rest of the wire center businesses are typically small businesses that surround large hospitals, such as motels, restaurants, pharmacies, medical equipment supplies and small enterprises. The remainder of the wire center is predominately residential. One business opportunity, unless extremely profitable and guaranteed for an extensive term, could not justify a build. Similarly, in ***** BEGIN CONFIDENTIAL** [redacted], **END CONFIDENTIAL ***** the wire center is predominately residential; it has strip malls, and small businesses, but no material concentration of commercial customers. All of

these wire centers represent parts of Dallas and Houston in which there are no corridors of high-rise buildings, but rather larger geographic wire centers which are predominately residential, with the smaller businesses that residential communities require dispersed throughout the region. Because of the small addressable market and the fact that the addressable market is dispersed throughout the geography of the wire center, constructing duplicative transport between any of these similar wire centers is not something that Alpheus or any efficient CLEC could economically justify.

16. In contrast, however, the economics can change when the wire center contains more than 20,000 business lines. Again, using the examples of Dallas and Houston, the charts below show the wire centers that have between 20,000 and 40,000 business lines.

DALLAS:

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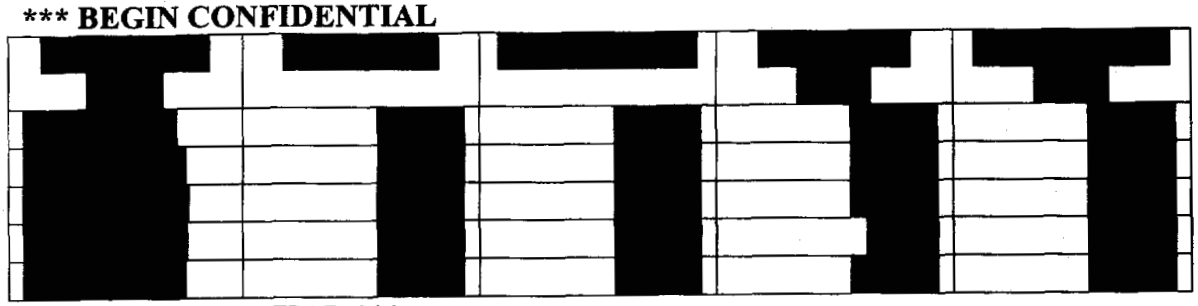

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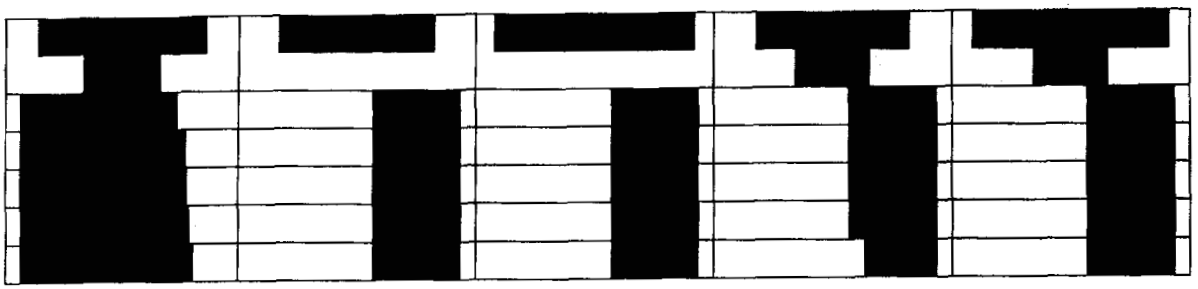

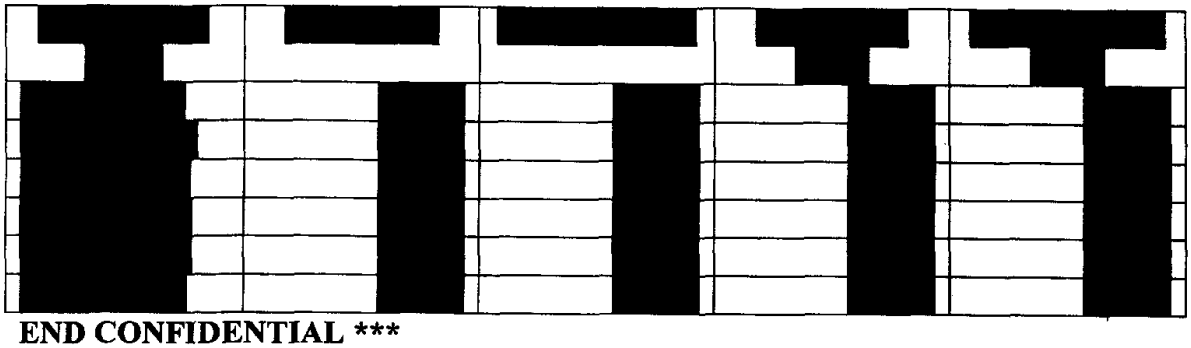

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17. With wire centers in this range, however, there are not as many similarities in the characteristics of each wire center. For instance, residential lines significantly outnumber business lines in ***** BEGIN CONFIDENTIAL** [redacted] **END CONFIDENTIAL ***** there is an insignificant number of residential lines. In other wire centers, for instance ***** BEGIN CONFIDENTIAL** [redacted], **END CONFIDENTIAL ***** the business lines outnumber the residential lines by 2-1. There are also many examples like ***** BEGIN CONFIDENTIAL** [redacted] **END CONFIDENTIAL ***** in which the number of residential and business lines are almost equal. In ***** BEGIN CONFIDENTIAL** [redacted], **END CONFIDENTIAL ***** there are more residential lines than business lines, and the wire center has one of the largest total number of lines in this tier, so it is impossible to determine the makeup of the wire-center. While there are some consistencies, there are strong variables that do not exist in the other groupings. For instance, ***** BEGIN CONFIDENTIAL** [redacted] **END CONFIDENTIAL ***** is predominately residential but also contains a number of shopping centers, but there are few major commercial buildings. In addition, the wire center covers a very large geographic area and the business complexes are dispersed

across the wire center. On the other hand, the *** **BEGIN CONFIDENTIAL** [redacted] **END CONFIDENTIAL** *** wire center covers a very small geographic area, is close to downtown and contains significant concentration of major skyscrapers with large business customers. This dynamic is repeated in Houston, *** **BEGIN CONFIDENTIAL** [redacted]. **END CONFIDENTIAL** *** This wire center houses the largest medical complex in the world, with large hospitals, large multi-tenant medical office buildings, hotel complexes, and college research facilities as well as a growing carrier POP locations. It appears that in wire centers with between 20,000 and 40,000 business lines there is little demographic consistency that would allow the Commission to use the existence of deployment on one or more routes to suggest deployment was economically possible on another route in the same category. Therefore, in this select tier, only a route-by-route analysis adequately represents on which routes in this subset CLECs can economically self-deploy.

18. Finally, wire centers with over 40,000 business lines are more homogenous; the number of business lines is always larger than the number of residential lines and, in most cases, by a significant margin. The charts below identify the wire centers in Dallas and Houston with over 40,000 business lines.

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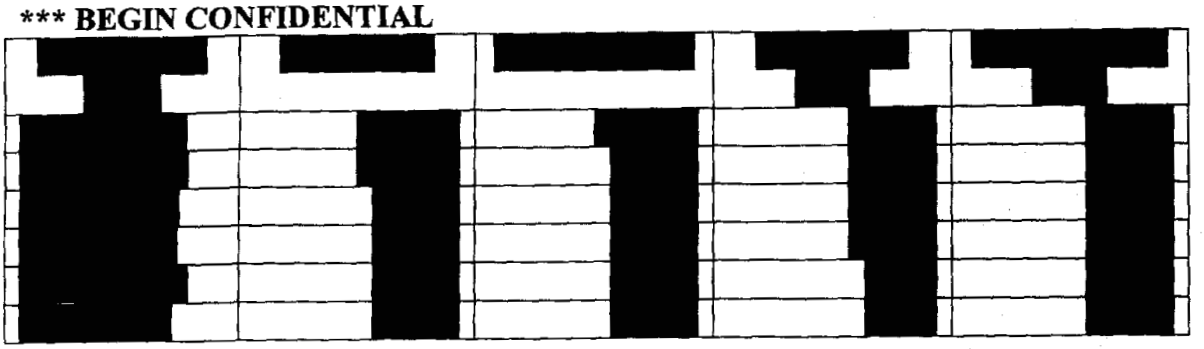

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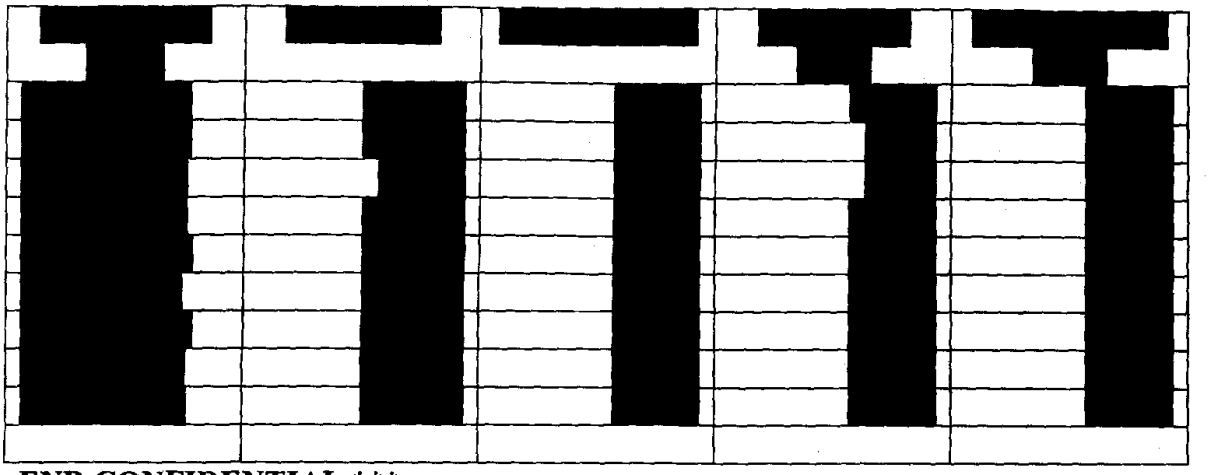

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19. The wire centers in this tier are much more similar to each other, as were the wire centers with less than 20,000 business lines. For each of these wire centers, the total number of lines are above 74,000, and the number of business lines, in most cases, significantly outnumber the number of residential lines. In cases where the business lines do not significantly outnumber other residential lines, they are approximately the same and the total numbers of lines suggests large densely populated areas with dense clusters of business customers.

20. The results of this analysis suggest that there are similarities in routes when the number of business lines is taken into consideration. The following is a summary of our findings.

Number of Business Lines	Total Lines	Residential Lines	Special Access Lines	Population Density	Alpheus Collocation

Number of Business Lines	Total Lines	Residential Lines	Special Access Lines	Population Density	Alpheus Collocation
Less than 6,000 business lines.	Total lines below 20,000	Number of Residential lines generally double number of business lines	Special access lines below 4,000	Low population density; few, if any, high rise buildings; geographically larger	Doesn't justify collocation
Between 6,000 and 20,000	Between 20,000 and 55,000 total lines	Residential lines significantly outnumber business lines	Special access lines between 4,000-12,000	Medium to Large residential population density; No cluster of high-rise buildings; Geographically larger	Justifies collocation but not self provisioning
Between 20,000 and 40,000 business lines	Between 48,000 and 95,000	Residential lines could be significantly more, significantly less or equal to business lines	Special access between 15,000 to 23,000. Special access lines could be higher than residential, the same or lower.	Could be medium to large residential, or almost completely business, could be large geographic wire center, small geographic wire center with high concentration of high-rise buildings.	Justifies collocation; justification for self-provisioning requires case-by-case analysis.
Above 40,000 business lines	Above 75,000	More business lines than residential, usually by significant number.	Over 29,000; typically exceeds number of residential lines.	Very high-density markets with clusters of central business districts.	Justifies collocation and often self-provisioning.

21. When looking at transport routes, there appears to be similarities in routes for the following subset categories: below 6,000 business lines, between 6,000 business lines and 20,000 business lines and over 40,000 business lines. For routes between 20,000 business lines and 40,000 business lines, it is difficult to identify similarities. In this 20,000 to 40,000 subset, the numbers can be skewed by the geographic size of the wire center, residential population density, as well as the number of high-rise buildings clustered in a business district. Other than this latter subset of 20,000 to 40,000, general assumptions can be made regarding the characteristics of the wire center subsets and whether CLECs can economically self-deploy fiber.

COLLOCATION ANALYSIS

22. Another substantial factor that the Commission should consider when deciding whether a reasonably efficient CLEC can deploy its own dedicated transport facilities is the investment in collocation. Collocation at an ILEC central office is crucial since most loops will be aggregated out of a central office. Although possible on occasion, it is clearly abnormal to see any loop route "built" by a CLEC from its POP directly to an end user premise. Such a build would be lengthy and costly and would require a long term revenue agreement, which seldom occurs in the competitive market. The RBOC UNE Report would have the Commission believe that there are vast competitive fiber networks that completely bypass ILEC central offices that interconnect CLEC facilities to end-users.[3] This is incorrect; third party fiber networks that bypass the ILEC central offices were deployed to provide carrier POP/carrier hotel interconnections where there are large